

ODA Hemp Program

2022 Laboratory Sampler Training

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Agenda

- Hemp Overview
- ODA Hemp Program Overview
- Grower Requirements
- Sample Requests
- Sampling Protocols
- Reporting to ODA
- Rule Updates
- Questions



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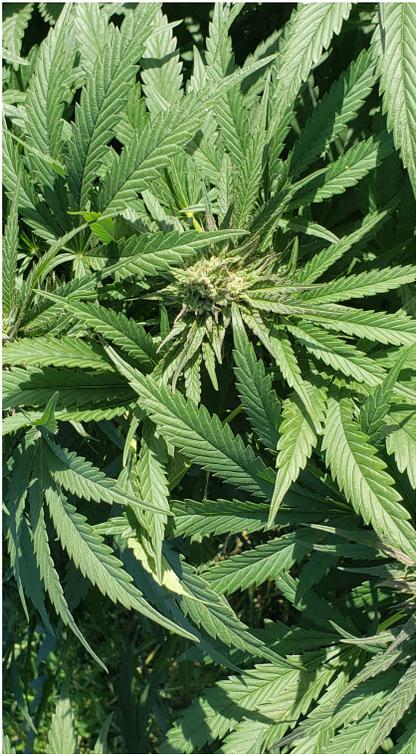
What is Hemp?

- Cannabis with a total THC concentration at or below 0.3%.
- Hemp and Marijuana are different varieties of the same plant, *Cannabis sativa*.
- Hemp varieties have higher concentrations of CBD cannabinoids and lower concentrations of THC.



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ODA Hemp Program



- Licenses hemp growers, handlers and agricultural hemp seed producers.
- Ensures the proper testing requirements are met by licensees.
- The Hemp Program regulates hemp using Oregon Administrative Rules (OAR) 603-048.

Hemp Grower Testing Requirements

- All licensed hemp production areas must be sampled and tested by a laboratory accredited by the Oregon Health Authority (OHA) and licensed by the Oregon Liquor and Cannabis Commission (OLCC) prior to harvest.
- Growers must:
 - Complete and send a sample request form to the lab prior to sampling.
 - Ensure that their test reports and sampling documents are submitted to ODA.
 - Harvest area sampled within 30 days from sample date.



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Sample Request Form

Key Points:

- A grow site can have multiple production areas.
- If the grower is licensed under a business name, the correct business name must be provided.
- If the grower is dividing a production area, they must use the harvest lot designation.
- Grower must submit a complete sample request form for each harvest lot being sampled.



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Hemp Sampling Request

To request sampling and testing, submit a complete copy of this form for each harvest lot or production area. Submit it to an OLCC-licensed and ORELAP - accredited laboratory of your choice according to the laboratory's procedures for requesting sampling.
To request ODA sampling and testing, submit the form to: hemp@oda.state.or.us
For a list of accredited laboratories, please visit: <https://oda.direct/Cannablabz>

Grower Information

GROWER NAME:	BUSINESS NAME (IF APPLICABLE):	DATE:
PHONE:	EMAIL:	LICENSE NUMBER:

Hemp Sampling Area - Must be a licensed growing area. Do not combine production areas. Sampling area may contain only cannabis of the same variety or strain to be harvested in a distinct time frame.

GROW SITE NAME:	PRODUCTION AREA NAME:	HARVEST LOT NAME: _____-2022-00_____ (Production area name) (Lot)
PHYSICAL ADDRESS:	CITY:	ZIP CODE:
TOTAL SIZE OF PRODUCTION AREA: ____ ACRES OR ____ SQUARE FEET		
GPS COORDINATES: LATITUDE: _____ LONGITUDE: _____ (MUST BE IN DECIMAL FORMAT, EG: 45.123456, -123.45623)		SIZE OF AREA TO BE SAMPLED: ____ ACRES OR ____ SQUARE FEET
AREA TYPE: (e.g. field, greenhouse, indoor)	INTENDED USE: (e.g. flower, biomass)	STRAIN TYPE:
DECLARED HARVEST DATE: (must be within 30 days from date of sampling)		

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Written Description: Describe the location of the production area or harvest lot such that the growing area is apparent from a visual inspection of the premises and is easily discernable from other production areas and harvest lots:

Visual Depiction: Oriented north, map or sketch the production area or harvest lot, showing at least one prominent feature (road, building, etc.). Please outline and label all surrounding harvest lots and production areas, including areas left untested. May be hand drawn.

Grower Request for Sampling and Testing

I, _____, request pre-harvest sampling and testing of production area(s) or harvest lot(s) of hemp as described in the attached hemp sampling request description(s) for THC analysis in accordance with OAR 603-048. Sampling and testing must comply with all requirements of OAR 603-048 including all exhibits and forms.

Signature: _____ Date: _____

Fees will apply. Laboratories or ODA may have backlogs for sampling and testing. It is the grower's responsibility to ensure timely sampling and testing.
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Sampling & Testing Protocols

To be sufficient to meet the requirement for pre-harvest THC sampling and testing under OAR Chapter 603, Division 48, testing must be conducted as described in Exhibit A & B Protocols.

Exhibit A:

<https://www.oregon.gov/oda/shared/Documents/Publications/Hemp/SamplingProtocol.pdf>

Exhibit B:

<https://www.oregon.gov/oda/shared/Documents/Publications/Hemp/HempTestingProtocol.pdf>



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On-Site Sampling

- Only samples taken by and remaining in the chain of custody of authorized labs qualify for testing.
- Sampling must produce a representative sample of the harvest lot.
- Avoid contamination.
- Disinfect tools after finishing all sample collections.
- Only sample plants with flowers when a purpose of the harvest lot is to produce flower.
- This is a pre-harvest test. Sampling of harvested hemp is not allowed.



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Arriving On-Site

- Meet with site representative and go over sample request form.
- Survey the site choose the best sampling pattern for the harvest lot.
- Complete the on-site sample form.

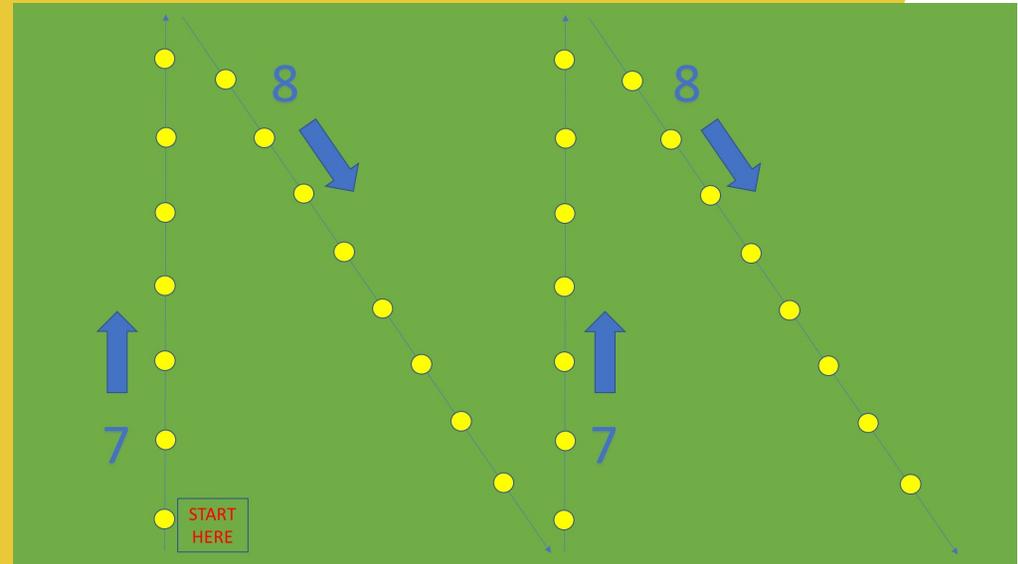
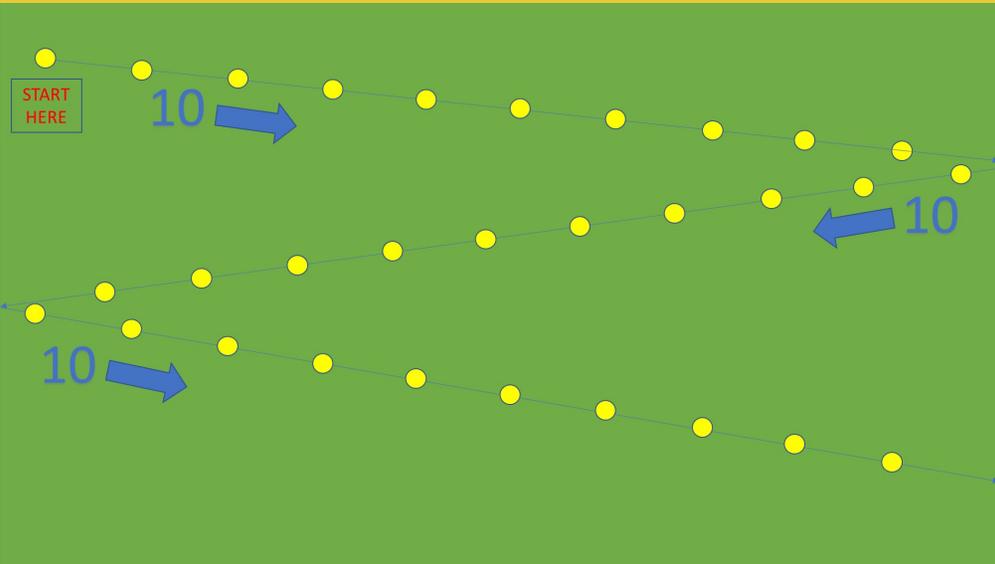
Equipment & Supply List:

- Forms (including extra sample request forms)
- Paper bags for samples
- Permanent pens for marking on paper sample bags
- Pruning shears for collecting foliar samples
- Single-use Coveralls
- Gloves, disposable
- Boots or booties (waterproof recommended)
- Rain gear (recommended)
- Boxes for storing sample equipment and samples
- Bleach, 10% solution or other acceptable surface disinfectant for cleaning tools or boots between fields
- Clipboard
- Clicker to count the number of samples collected (optional)



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Sampling Patterns



On-Site Sampling Form

Helpful to include:

- Number of samples taken.
- Obstacles or barriers that prevent the ability to sample in a sawtooth pattern.
- Harvest lots that remain unsampled.



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Hemp On-Site Sampling Form

For laboratory use only. Complete one copy of this form for each harvest lot or production area.

Laboratory Information

LABORATORY NAME:	SAMPLER NAME (PRINTED):	DATE:
GROWER NAME:	GROWER BUSINESS NAME (IF APPLICABLE):	NUMBER OF HARVEST LOTS SAMPLED:
TIME SAMPLING STARTED:	REPRESENTATIVE (PRESENT AT THE TIME OF SAMPLING):	

Hemp Sampling Area – Must be a licensed growing area. Do not combine production areas. Sampling area may contain only cannabis of the same variety or strain to be harvested in a distinct time frame.

GROW SITE NAME:	PRODUCTION AREA NAME:	HARVEST LOT NAME: _____2022-00_____ (Production area name) (Lot)
PHYSICAL ADDRESS:	CITY:	ZIP CODE:
		TOTAL SIZE OF PRODUCTION AREA: _____ ACRES OR _____ SQUARE FEET
GPS COORDINATES: LATITUDE: _____ LONGITUDE: _____ (MUST BE IN DECIMAL FORMAT, EG: 45.123456, -123.45623)		SIZE OF AREA TO BE SAMPLED: _____ ACRES OR _____ SQUARE FEET
AREA TYPE: (e.g. field, greenhouse, indoor)	INTENDED USE: (e.g. flower, biomass)	STRAIN TYPE:
		DECLARED HARVEST DATE: (must be within 30 days from date of sampling)

Written Description: Describe the location of the production area or harvest lot such that the growing area is apparent from a visual inspection of the premises and is easily discernible from other production areas and harvest lots:

Visual Depiction: Map or sketch each harvest lot or production area at the time and date of sampling to show the location of the grow area. **This must include the sampling pattern.** The description and depiction must be sufficient such that the growing area of the harvest lot is apparent from a visual inspection of the premises and is easily discernible from other harvest lot growing areas.

Agreement
The harvest lot(s) described in the harvest lot on-site sampling description(s) included with this form accurately reflect the harvest lot location(s) and description(s) and the sampling conducted by the sampler. The licensed grower agrees to the sampling as described in the attached descriptions.

Grower/representative signature: _____
Name: _____

Sampler signature: _____
Name: _____

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Sample Collection



- Cut approximately five to eight inches in length from the main stem (that includes the leaves and flowers), the terminal bud (that occurs at the end of a stem) or central cola (cut stem that could develop into a bud).
- Avoid sampling dead, diseased, or mechanically injured plants.
- Take one sample per plant, randomly throughout the harvest lot. Place each sample in a paper bag.
- Since they are a measure of the entire harvest lot, all samples from the harvest lot are collected into a single bag.

Sample Collection

- Each composite sample should consist of a maximum of 30 plant heads of about 5-8 inches.
- For small fields or when sampling from a known number of plants, the Hypergeometric Table should be used.
- The sample size cannot be less than 4 ounces, which is the minimum amount necessary for laboratory tests and file samples.

Hypergeometric Table for Random Sampling

Total number of plants	Randomly select this number of plants to sample:
1-13	Sample all plants
14-15	13
16-17	14
18-19	15
20-22	16
23-25	17
26-28	18
29-32	19
33-38	20
39-44	21
45-53	22
54-65	23
66-82	24
83-108	25
109-157	26
158-271	27
272-885	28
886-200,000	29



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Sample Collection



- Do not sample non-contiguous areas.
 - More than one greenhouse
 - More than one hoop house
 - Fields with:
 - Roads (exception for standard driveways)
 - Non-accessible fields via fences
 - Irrigation ditches
 - Waterways (creeks)
 - Obstructing features
 - Tree lines
- The areas sampled should be consistent with the areas provided on the grower's license.

Preparation of Composite Sample



After placing all samples from the harvest lot into a paper bag, seal and record on the bag:

- Field name
- Harvest lot identifier
- Date of sampling
- Sampler signature
- Grower/ business name

Maintain custody and sample integrity during transport to the testing laboratory.

Reporting Results to ODA

Online

- Submit your pre-harvest test online
- Attach on-site sampling and sample request form once you've entered the results.
- Save the PDF of the test report generated.
- Send the test report, along with sampling documents to the grower who requested the testing.

Email

- Submit your ODA Hemp THC Report, along with the on-site sampling form and sample request form to the ODA via email at:
- hemptestreports@oda.oregon.gov
- Send the grower who requested testing the ODA Hemp THC Report and sampling forms.



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Pre-Harvest THC Report



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503.986.4652 | hemp@oda.state.or.us | Oregon.gov/ODA

Hemp Pre-Harvest THC Report

For laboratory use only. Complete one copy of this form for each harvest lot or production area.

- This form is only to be used for reporting total tetrahydrocannabinol (total THC) in pre-harvest tests of hemp as required by ORS 571.300 to 571.315; and OAR 603-048.
- IT IS NECESSARY TO LEGIBLY COMPLETE EVERY SECTION OF THIS FORM. Incomplete or illegible forms shall be returned and shall not be accepted until deficiencies are corrected.
- Complete a copy of this report for each harvest lot as defined by OAR 603-048-0010 (17). The form must be submitted to the ODA at hempstestreports@oda.oregon.gov and to the grower who submitted the request for testing.
- Completed copies of the Sampling and Testing Request Form and On-Site Sampling Form corresponding to the harvest lot must be submitted to ODA with this report.

GROWER INFORMATION:

PRIMARY LABORATORY TESTING:	SECONDARY LABORATORY TESTING (IF APPLICABLE):	
INDICATE (CHECK BOX) IF THIS IS A: FIRST TEST: <input type="checkbox"/> SECOND TEST: <input type="checkbox"/> THIRD TEST: <input type="checkbox"/> RESAMPLE: <input type="checkbox"/>	GROWER NAME (IF BUSINESS, LIST BUSINESS NAME):	
GROWER LICENSE NUMBER:	GROWER PHONE NUMBER:	GROWER EMAIL:

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HARVEST LOT INFORMATION:

GROW SITE NAME:	PRODUCTION AREA NAME:	HARVEST LOT NAME: _____-2022-00_____ (Production area name) (Lot #)	
GROW SITE ADDRESS:	CITY:	STRAIN TYPE:	
SAMPLED BY:	SAMPLE DATE:	RECEIVED BY:	RECEIVED DATE:

ANALYTICAL REPORT FOR TETRAHYDROCANNABINOL(THC) CONTENT:

METHOD REFERENCE:	ANALYTICAL RESULTS: _____%TOTAL THC	MEASUREMENT OF UNCERTAINTY*:
DATE TESTED:	CHECK BOX IF: PASS: <input type="checkbox"/> FAIL**: <input type="checkbox"/>	

LABORATORY TECHNICIAN NAME: _____
SIGNATURE: _____ DATE: _____

REVIEWED BY NAME: _____
SIGNATURE: _____ DATE: _____

*Measurement of uncertainty means the parameter, associated with the result of the measurement, that characterizes the dispersion of the values that could reasonably be attributed to the particular quantity subject to measurement.

**A sample fails testing when the application of the measurement of uncertainty to the amount of total THC of the sample calculated in accordance with OAR 333-064-0100(4) reported by a laboratory produces a distribution or range that does not include 0.3 percent or less on a dry weight basis.

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Common Issues



Not reporting test results or required documents.

Combining production areas for testing.

Sampling non-contiguous areas as one.

Combining two grower's fields that are adjacent.

Incorrectly advising growers on current rules and regulations.

Illegible or incomplete paperwork.



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Failed Pre-Harvest Tests

- Failed tests must be reported within 24 hours.
- Growers can:
- Have the file sample retested.
- Resample the failed harvest lot.
- If neither option is chosen, or if retesting/resampling fails, the harvest lot must be destroyed.
- ODA works through the retesting options and/or destruction with the grower.



Rule Updates effective 1/1/22

Harvest Lots by strain type

Pass/Fail Criteria

Harvest Window

Unrestricted Access

USDA Reporting



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Harvest Lots by Strain Type

Prior to January 1, 2022, any combination of hemp strains could be planted in a single harvest lot.

On and after January 1, 2022, all harvest lots must have a single hemp strain variety.

- “Harvest Lot”:
Means a quantity of Cannabis of the same variety or strain harvested in a distinct timeframe..



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Pass/Fail Criteria

Prior to January 1, 2022:

pass= $\leq 0.34\%$ total THC dry weight

fail= $> 0.34\%$ total THC dry weight

On and after January 1, 2022

- fail: when the application of the measurement of uncertainty to the amount of total THC of the sample calculated in accordance with OAR 333-064-0100(4) reported by a laboratory produces a distribution or range that does not include 0.3 percent or less on a dry weight basis



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Pass/Fail Example

Fail

Result: 0.36% total THC

MU: 15%

$$(0.36 * 15) / 100 = 0.054$$

Range=

$$0.36 + 0.054 = 0.41$$

$$0.36 - 0.054 = 0.31$$

Pass

Result: 0.36% total THC

MU: 17%

$$(0.36 * 17) / 100 = 0.0612$$

Range=

$$0.36 + 0.0612 = 0.42$$

$$0.36 - 0.0612 = 0.30$$



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Harvest Window

Prior to January 1, 2022:

- Begin harvest in earnest within 28-days from date of pre-harvest testing.

On and after January 1, 2022:

- Sampling of the harvest lot must occur not more than thirty (30) days prior to harvest. Harvest must be complete within the applicable time period for sampling, or the grower must arrange for additional sampling of the unharvested cannabis in accordance with these rules.



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Unrestricted Access

The grower or authorized representative must provide the sampler with unrestricted and unobstructed access to all hemp and other cannabis plants whether growing or harvested and all lands, buildings, and other structures used for cultivation, handling, and storage of all hemp and Cannabis and all other locations listed in the grower's license.



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USDA Reporting

Beginning January 1, 2022, the laboratory reports all results from pre-harvest testing to the United States Department of Agriculture. The test results report must contain the following information:

- Grower's license number
- Grower's name
- Business address of the grower
- Harvest lot identifier
- Name of the laboratory
- Date of the test and report

Report using USDA heMP platform: <https://www.ams.usda.gov/rules-regulations/hemp/hemp-emanagement-platform>



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Thank you!

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